VIRGINIA MILITARY INSTITUTE

LEXINGTON, VIRGINIA

REVIEW OF SYSTEMS IMPLEMENTATION

MARCH 22, 1999

*A*UDITOR OF

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COMMONWEALTH OF VIRGINIA

March 22, 2000

The Honorable James S. Gilmore, III
Governor of Virginia

The Honorable W. Richard J. Holland
Chairman, Joint Legislative Audit
  and Review Commission

The Board of Visitors
Virginia Military Institute

As part of our audit of Virginia Military Institute for the year ended June 30, 1999, we performed a review of the Institute's implementation of new administrative systems. The Institute implemented these systems in a very short time frame in order to address its Year 2000 systems' issues.

While we are conducting our audit of the Institute, we thought it would be helpful to provide the Institute with this interim report. We hope this interim report will provide the Institute's management with information concerning their systems implementation and our findings so that management can take prompt corrective action.

Overall, we concluded that considering the short time allowed for implementation, Institute staff effectively installed and began use of the system. Our findings deal primarily with strengthening security and more effectively using the system to increase administrative efficiencies.

We plan to issue our report on the annual audit of the Institute in May 2000 and that report will refer to this document. We would like to acknowledge the cooperation of the staff and management of the Institute.

<u>EXIT CONFERENCE</u>

We discussed this report with management on April 3, 2000.

AUDITOR OF PUBLIC ACCOUNTS

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Virginia Military Institute
Review of New Systems Implementation

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In performing our audit, we reviewed the Institute's implementation of new administrative systems (Colleague). Our review considered the risks associated with the implementation of a new system and the effect it has on our audit. Some of the weaknesses below are a result of the design of the vendor's system and others are a result of management decisions made during the implementation of Colleague. We noted the following areas of concern:

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System Configuration Issues

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Re-enable On-line Approvals

The Institute disabled on-line approvals in the Purchasing and Accounts Payable modules because management considered the on-line approval process very cumbersome and time consuming. For on-line approval, the approver must verify the information on three screens and enter their user id and password for each payment processed.

Employees currently approve payments using paper forms rather than reviewing and approving transactions from the system. This process requires the manual production of requisitions, purchase orders and vouchers. By disabling on-line approvals, the Institute assumes the risk that the approver may not approve the same item on paper as the transaction entered in the system.

This manual process increases the risk of errors and irregularities occurring and going undetected. We strongly recommend that the Institute re-evaluate its decision to disable this control and re-enable online approvals. We understand that the Institute is working with the vendor seeking improvements to the system to make the on-line approval process more efficient.

Segregate Access to Changes to Payroll Master Database

Payroll clerks have system access that allows them to make changes to employee records in the master database for taxes, benefits/deductions, and direct deposit information. A proper segregation of duties requires that Human Resources personnel rather than Payroll make these changes to the master database. The Institute should remove this inappropriate access. After we brought this matter to their attention, Institute management implemented corrective action.

Enter Amount Tendered into the System

The Institute does not require cashiers to enter the amount tendered by payors into the system. This practice does not provide a complete transaction history of each transaction for the daily closeout. The cashier should enter the amount tendered into the system and allow the system to calculate change, which provides a complete transaction history and minimizes errors in calculating change. After we brought this matter to their attention, Institute management began requiring cashiers to enter the amount tendered into the system effective March 1, 2000.

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Security Issues

Review Security Class Access

In our review of security class access, we noted several instances of inappropriate class assignments. In Colleague, security classes limit user access within the system and restrict users to certain areas or functions. We noted the following specific security issues:

- The Institute assigned three employees access to both the Benefit Deduction and Financial Aid setup classes. These setup classes grant access to powerful module-wide settings that the Institute should limit to as few employees as possible.

- The Institute assigned a sole employee the ability to run the Month End closing process. The Institute should assign an additional employee this ability so that the additional employee can run critical processes if the primary individual is not available.

- The Institute assigned several employees to the class that can create journal entries. However, Institute policy requires one of two established employees enter journal entries. The Institute should remove access to all other individuals to comply with Institute policy.

The Institute should correct the specific security issues noted above and perform a complete review of its system access. The Institute should also develop procedures to require periodic reviews of system access by data owners. After we brought this matter to their attention, Institute management implemented corrective action.

Segregation of Duties

Properly Segregate Duties

The following employees perform duties that do not provide for an adequate segregation of duties. Failure to properly segregate duties can lead to irregularities occurring and going undetected. Specifically, we found the following:

Cash Receipts\Receivables

- The employee that receives payments in the mail also enters them into Colleague.

Purchasing

- The employee that creates and approves purchase orders also performs the reconciliation function.

In an ideal control environment, the authorization, recording, custody, and reconciliation function are adequately segregated. Due to the Institute's small size and organizational structure, a complete segregation of duties is not always feasible; however, the Institute should segregate the above duties or implement adequate compensating controls. After we brought this matter to the their attention, Institute management implemented corrective action.

Improve Efficiency through Better Use of System Capabilities

Colleague has many functions, capabilities and enhancements that can improve the efficiency of the Institute's daily operations. We noted several features that we believe the Institute should implement to improve efficiency through a better use of the system's capabilities. Our findings follow:

Registration

- The Institute manually verifies the eligibility of cadets for registration. The Registration Module allows the creation of eligibility rules that cadets must meet to complete registration. Such rules may include not having any outstanding balances. The Institute should create eligibility rules that allow Colleague to perform automated criteria verifications to increase efficiency and minimize errors.

- The Institute uses manual procedures that prevent walk-in registration of non-cadets. The Institute should create system rules to prevent walk-in registration of non-cadets during "regular" registration sessions.

- The Institute does not use the auto populate default features in the Registration Parameters screen to complete and enter routine information. Setting auto populate defaults on this screen can help improve data entry efficiency.

- The Institute has purchased the web interface that would allow cadets to register over the internet. We encourage the Institute to work with the vendor to evaluate the possible efficiency gains by implementing the web interface.

- Academic advisors manually determine if cadets meet all course criteria (i.e. prerequisites). Colleague has the ability to automate this function. We understand that the Institute has not implemented this feature because of technical glitches in the system software. The Institute should request the vendor to correct these glitches and, when corrected, the Institute should implement this feature.

Financial Aid

- The Financial Aid office manually processes financial aid awards. The Financial Aid Module can perform automatic packaging of awards for cadets. The Institute should implement this function to improve efficiency and minimize errors.

- Colleague allows the creation of a Global Eligibility Criteria in the Financial Aid Module to prevent the transmission to Account Receivable of awards that do not meet established criteria. We understand that the Institute is considering implementing this feature for the 2000-2001 award year and encourage the implementation of this feature.

- The Financial Aid Office makes manual cost of attendance adjustments to record additional allowances permitted for independent students. The Institute can improve efficiency by creating a budget rule for independent students on the SBRD screen.

Payroll

- To issue a replacement payroll check, the Institute reverses the original payment and processes a revised payroll to replace the employee's check. The Institute could gain efficiency by using the replacement check process in the Payroll module to issue replacement checks.

General Ledger

- The Institute does not use a process in the General Ledger Module that can condense GL Activity (CGLA) allowing reports to run faster. If the Institute experiences system resource problems, it should consider using this function.

Reports

- The Institute does not run reports and processes in the "Phantom" mode but rather runs reports and processes in the "Foreground" mode. When a user runs reports in the "Foreground" mode, there is a possibility that the user's terminal will not process other transactions while executing the report. The Institute has not experienced processing problems; however, if the Institute experiences problems with system resources, it should run reports and processes in the "Phantom" mode.

The Institute should give careful consideration to the items listed above, which we believe would add efficiency to the Institute's operations.